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| STRAUB & POKOTYLO 620 TINTON AVENUE BLDG. B, 2ND FLOOR TINTON FALLS, NJ 07724 | | | EXAMINER PARRA, OMAR S | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/731,756

Applicant(s)

SAZZAD ET AL.

Examiner

Omar Parra

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/09/2003</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9, 12-18, 20, 22, 24-32, 38, 39, 41-44 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Arsenault et al. (hereinafter 'Arsenault', Patent No. 6,701,528).

Regarding claim 1, 2, 12 Arsenault teaches a method of providing a program L time units in length to a user (**The program being served to the user has a length time L: all the segments 806 A-E, Fig. 8A, put together at a given time window; segments 810 A-E; col. 11 lines 7-22; col. 13 lines 10-24**), comprising the steps of:

storing a first segment of said program (**804, Fig. 8A; col. 2 lines 8-21; col. 9 lines 46-60; col. 11 lines 23-44; col. 13 lines 10-24**);

beginning the presentation of the stored first segment of said program to the user (**806E, Fig. 8A, col. 2 lines 21-41; col. 11 lines 45-56; col. 13 lines 25-65; col. 14 lines 24-32**);

receiving a second segment of said program at least L time units after beginning to store the first segment of said program (**806 D, Figs. 8A-B, of the program that has L time units of length; col. 9 lines 46-60; col. 11 lines 45-56; col. 13 lines 10-65; col. 14 lines 24-32**); and

presenting to the user the second segment of said program when the presentation of the first segment of said program is completed (**col. 9 lines 46-60; col. 11 lines 23-56; col. 12 lines 8-54; col. 13 line 10-col. 14 line 33**).

Regarding claim 3, Arsenault teaches a method further comprising the steps of: receiving program guide information (**col. 7 lines 29-39; col. 9 lines 21-37**); and identifying, from the received program guide information, a broadcast channel upon which the second segment of said program is being broadcast (**col. 9 line 61-col. 10 line 6; col. 16 lines 6-49; col. 17 lines 7-23**).

Regarding claims 4, 22, 26 and 44, Arsenault teaches a method wherein the first segment of said program is an initial program segment (**804, Fig. 8A; col. 2 lines 8-21; col. 9 lines 46-60; col. 11 lines 23-44; col. 13 lines 10-24**);

wherein the second segment of said program is a main program segment (**If the number of tuners of the receiver allows, the rest of the movie -main segment- is downloaded in segments at once, forming the entire movie, 806 A-D, Fig. 8A; col. 13 lines 25-65; col. 14 lines 33-51**) and wherein the second segment of said program is received as part of a periodic broadcast of said first and second segments of said

program (col. 9 line 61-col. 10 line 6; col. 11 lines 7-22, where the same program is broadcast every period of time in different channels).

Regarding claim 5, Arsenault teaches a method further comprising the step of:
selecting, from a plurality of broadcast channels upon which the second segment of said program is being broadcast, one of said broadcast channels from which to receive the second segment of said program (**The second segment 806D is selected from channel 6, instead of channels 1-5 and 7, which did or will broadcast the segment**).

Regarding claim 6, Arsenault teaches a method wherein the step of selecting one of said broadcast channels includes the step of selecting the first broadcast channel upon which the second segment of said program will be transmitted at or following the start of the presentation of the stored first segment of said program to the user (**Channel 6, at the time of the presentation, is the channel that is showing the following segment of the program, Fig. 8A; col. 11 lines 7-44; col. 14 lines 24-32**).

Regarding claim 7, Arsenault teaches a method wherein the maximum delay between broadcasts of the second program segment during a fixed time interval is C time units, the step of storing a first segment of said program including the step of storing at least C time units of video data(**The maximum delay between broadcasts of the second segment is 30 min., Fig. 8A, where for second video segment 806D**

transmitted at 7:30 in channel 6, will be rebroadcast at 8:00 in channel 7; col. 11 lines 7-56. The first segment of video recorded also has a length of C, 30 min., Fig. 8A); and wherein $L > C$ (The program length L is bigger than the length of the second segment C).

Regarding claim 8, Arsenault teaches a method wherein the maximum delay between broadcasts of the second program segment is C time units, the step of storing a first segment of said program including the step of storing at least Y time units of video data, where $L > C \geq Y$ (The program length L is greater than the maximum rebroadcast length time and the needed video data time length of the second segment that needs to be recorded can be less or equal to C. If the user presentation selection is synchronized with the rebroadcast time, the next segment has to be recorded in its entirety, while if not, only a smaller portion of video is needed to be recorded, col. 11 line 57- col. 12 line 7, 808, Fig. 8B).

Regarding claim 9, Arsenault teaches a method wherein the method further comprises the step of:

broadcasting the first segment of said program which is stored, on a first communications channel, prior to performing the storing step (Before storing segment 804 at 6:30 on channel 4, it was broadcast on channel 3 at 6:00, on channel 2 at 5:00, etc, Figs. 6 and 8A, col. 11 lines 7-56) ; and

broadcasting the second segment of said program which is presented to the user on a second communications channel prior to performing the receiving step (**Before the receiving of segment 806 D at 7:30 on channel 6, it was already broadcast at 7:00 on channel 5, and at 6:30 on channel 4, etc., Figs. 6 and 8A, col. 11 lines 7-56).**

Regarding claim 13, Arsenault teaches a method wherein the first and second communications channels are different physical communication channels with different carrier frequencies (**col. 14 line 33-col. 15 line 11).**

Regarding claim 14, Arsenault teaches a method wherein the first and second communications channels are different logical communication channels implemented using the same physical communications channel (**col. 13 line 66-col. 14 line 32).**

Regarding claim 15, Arsenault teaches a method wherein said program is a user selected program (**col. 11 lines 45-67); and**

wherein the first segment of said program is one of a first plurality of program segments transmitted on the first communications channel (**Segment 804 on channel 4, is one of the multiple segments transmitted on said channel, being 806B, one of those transmitted segments but at a later time)**, the method further comprising the step of:

storing, in the storage device, additional program segments included in the first plurality of program segments **(segments 806 A-D, are stored, where 806B is stored from the same channel as 804, Fig. 8A)**; and

accessing information indicating which program segments correspond to said user selected program **(col. 10 line 56-col. 11line 6)**.

Regarding claim 16, Arsenault teaches a method wherein the accessed information further includes information about the order in which the segments corresponding to the user selected program are to be presented **(col. 15 line 40-col. 16 line 5)**.

Regarding claims 17, 18 and 29, Arsenault teaches a method , wherein the accessed information indicates that a first one of the additional program segments **(806 C, Fig. 8A)** is to be presented immediately following the second program segment **(col. 15 line 40-col. 16 line 5)**, the method further comprising the step of:

presenting to the user a first one of the additional program segments immediately following the presentation of the second program segment **(col. 12 lines 8-20; 710, Fig. 7B)**.

Regarding claim 20, Arsenault teaches a method wherein the second program segment is presented to the user without being stored in said storage device **(As**

shown, segment 806 can be spliced and presented to the user at time Tsp1, where it has not been stored yet, Fig. 8B).

Regarding claim 24, Arsenault teaches a method further comprising the step of:
beginning the presentation of the stored first segment of said program to the user at or prior to performing the step of receiving a second segment of said program **(Channel 6, at the time of the presentation, is the channel that is showing the following segment of the program and from which the storing of the second segment is performed, Fig. 8A; col. 11 lines 7-44; col. 14 lines 24-32).**

Regarding claim 25, Arsenault teaches a method further comprising the step of:
storing at least a portion of the second program segment prior to presenting the second program segment to the user **(col. 13 lines 25-65).**

Regarding claim 27, Arsenault teaches a method of presenting a program to an individual, comprising the steps of:

operating a user device to record a broadcast of an initial portion of the program **(804, Fig. 8A; col. 2 lines 8-21; col. 9 lines 46-60; col. 11 lines 23-44; col. 13 lines 10-24);**

receiving information about the time and channel upon which copies of the program are broadcast **(col. 7 lines 29-39; col. 9 lines 21-37);**

operating the user device to detect a request to view said program (706, Fig. 7A;
col. 11 lines 45-56);

in response to the request to view said program, operating the user device to
begin presenting the initial portion of the program to the individual using the recorded
initial portion of the program (710, Fig. 7A); and

operating the user device to obtain the data corresponding to a remaining portion
of said program from one of said broadcast copies of said program (708, Fig. 7A).

Regarding claims 28 and 39, Arsenault teaches a method further comprising the
step of:

accessing said information about the time and channel upon which copies of the
program are broadcast (**col. 9 line 61-col. 10 line 6; col. 16 lines 6-49; col. 17 lines 7-
23**); and

selecting one of the broadcast copies from which to obtain the data
corresponding to the remaining portion of said program as a function of the accessed
information (**The second segment 806D is selected from channel 6, instead of
channels 1-5 and 7, which did or will broadcast the segment, which is part of a
copy of the program**).

Regarding claim 30, Arsenault teaches a method wherein the step of operating a
user device to record a broadcast of an initial portion of the program includes the step
of:

recording the initial portion of said program in a cache located on the premises of said individual (**col. 6 line 55-col. 7 line 9; col. 13 lines 10-24; col. 14 lines 24-64**).

Regarding claims 31, Arsenault teaches a method wherein further comprising the step of:

operating a video server (**102, Fig. 1; col. 4 lines 35-39**) to broadcast to the premises of multiple individuals (**110, Fig. 1; col. 4 lines 35-39**), in a time staggered manner, copies of the said program (**col. 9 line 61-col. 10 line 6; col. 11 line 7-22**).

Regarding claims 32, Arsenault teaches a method wherein the program is a movie being provided as part of a pay per view service (**col. 4 lines 35-39; col. 13 lines 10-24**).

Regarding claims 38 and 42, Arsenault teaches a device for processing program data (**integrated receiver/decoder 200, Fig. 2; col. 5 lines 16-18**), comprising:

a receiver circuit for receiving broadcast program data (**204, Fig. 2**);
a program cache coupled to the receiver circuit (**232, Fig. 2; col. 6 lines 55-66**);
means for identifying and storing in said program cache initial portions of programs which are broadcast on a periodic basis (**230, 210 or 208, Fig. 2; col. 6 line 66-col. 7 line 40**);

means for detecting user input requesting the presentation one of the programs which are transmitted on a periodic basis (**210, Fig. 2; 706, Fig. 7A**);

means for outputting a cached initial portion of said user requested program in response to said user input requesting the presentation of one of the programs (**col. 6 lines 3-16**); and

means for obtaining, from a periodic broadcast of the user requested program which starts subsequent to caching of the initial portion of said user requested program, a remaining portion of said user requested program (**col. 9 line 61-col. 10 line 6; col. 11 lines 7-22, where the same program is broadcast every period of time in different channels**); and

means for outputting the remaining portion of said user requested program immediately following the output of the cached initial portion (**col. 6 lines 3-16**).

Regarding claim 41, Arsenault teaches a device further comprising:

means for transmitting requests to view a user selected program (**col. 17 line 57-col. 18 line 5**).

Regarding claim 43, Arsenault teaches a device further comprising:

means for accessing program information indicating which program segments are included in said program and the time at which at least one of the included program segments will be broadcast (**col. 10 line 56-col. 11line 6; col. 15 line 40-col. 16 line 5**).

Regarding claim 48, Arsenault teaches a system for presenting a program to an individual, comprising the steps of:

a server (**102, Fig. 1; col. 4 lines 35-39**) for broadcasting to the premises of multiple individuals (**110, Fig. 1; col. 4 lines 35-39**), in a time staggered manner, copies of the program and information about the time and channel upon which copies of the program will be broadcast (**col. 9 line 61-col. 10 line 6; col. 11 line 7-22**);

a user device in communication with said server (**integrated receiver/decoder 200, Fig. 2; col. 5 lines 16-18**), the user device including:

means for recording a broadcast of an initial portion of the program (**232, Fig. 2; col. 6 lines 55-66**);

means for receiving information about the time and channel upon which copies of the program are broadcast (**204, Fig. 2**);

means for detecting a request from a user to view said program (**210, Fig. 2; 706, Fig. 7A**);

means for presenting the recorded initial portion of the program, in response to the request to view said program (**col. 6 lines 3-16**), to the user; and

means for obtaining the data corresponding to a remaining portion of said program from a copy of said program (**col. 9 line 61-col. 10 line 6; col. 11 lines 7-22, where the same program is broadcast every period of time in different channels**).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **19, 21, 23, 33-37, 45-47 and 49** are rejected under 35 U.S.C. 103(a) as being unpatentable over Arsenault et al (hereinafter 'Arsenault', Patent No. 6,701,528) in view of Hane (Pub. No. 2006/0041921).

Regarding claims 19, 21, 23, 33, 36, 37, 45-47 and 49, Arsenault teaches a system (with respective method) for providing content to a plurality of users (**110, Fig. 1; col. 4 lines 35-39**), the system comprising:

a server (**102, Fig. 1; col. 4 lines 35-39**) for broadcasting a plurality segments, and program information indicating the included segments (**col. 9 line 61-col. 10 line 6; col. 11 line 7-22**);

a plurality of user devices in communication with said server, at least some of the user devices being located at different subscriber premises which are physically remote from each other and the server (**110, Fig. 1; col. 4 lines 35-39**);

each of the plurality of said user devices (**integrated receiver/decoder 200, Fig. 2; col. 5 lines 16-18**) including:

a cache for storing regional news segments (**232, Fig. 2; col. 6 lines 55-66**);

means for accessing the broadcast program segment information to identify segments which are included in a program **(230, 210 or 208, Fig. 2; col. 6 line 66-col. 7 line 40)**;

means for presenting at least one regional news program by outputting at least one cached segment and by outputting **(col. 6 lines 3-16)**, immediately following the output segment, at least one segment corresponding included in the same program as the segment **(col. 9 line 61-col. 10 line 6; col. 11 lines 7-22, where the same program is broadcast every period of time in different channels)**.

On the other hand, Arsenault does not explicitly teach that the program served to the user is a news program containing regional and non-regional news, where the regional segments are cached and presented after a non-regional news segment.

However, in an analogous art, Hane teaches a system that serves variety of content (PPV, news, advertisement) ([0034]). Said system is able to cache regional segments at the client device, and able to interleave them with non-regional segments at certain points of the national broadcast ([0014], [0015], [0019]-[0020], [0039]-[0040], [0045], [0076] and [0077]).

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to have modified Arsenault's invention with Hane's feature of caching regional news segments or advertisings and playing them with national segments in a spliced manner for the benefit of *'increasing the efficient use of spectrum for broadcast by reducing the transmission of redundant programming and other information, while*

providing for the transmission of local programming to particular geographic areas or markets', Hanes [0041].

Regarding claim 34, the combined teachings of Arsenault and Hane teach a system (with respective method) wherein the broadcast program segment information further includes information about the time at which each of the program segments included in a regional program is to be presented (**Hane: [0039]; Arsenault: col. 15 line 40-col. 16 line 5**).

Regarding claim 35, the combined teachings of Arsenault and Hane teach a system (with respective method) wherein the step of broadcasting a plurality of regional program segments includes the step of operating a satellite to transmit the regional program segments to the user device (**Hane: 45, Fig. 1; [0035]-[0036]; Arsenault: 108, Fig. 1; col. 5 lines 15**); and

wherein the user device is a satellite receiver located at the premises of one of a plurality of users (**Arsenault: col. 5 lines 16-28; Hane: [0038], 58 A/B, Fig. 1**).

5. Claims **10, 11 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Arsenault et al. (hereinafter 'Arsenault', Patent No. 6,701,528) in view of Hooper et al. (hereinafter 'Hooper', Patent No. 5,442,390).

Regarding claims 10 and 40, Arsenault teaches a system having a computer readable medium (Video storage device 232, Fig. 2, which can be a hard disk drive, a read/write compact disc of DVD, a solid state RAM, or any other storage medium), at the client, that stores or caches video segments of a program for presentation to a user (col. 6 line 55-col. 7 line 9). On the other hand, Arsenault does not explicitly teach that the storage medium is a FIFO cache.

However, in an analogous art, Hooper teaches a system for VOD service containing a FIFO cache memory (costumer segment cache 14, Fig. 12; col. 15 lines 10-65) that store or caches video segments of a program for presentation to an user (col. 15 lines 10-65).

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to have substituted one storage medium for the other to achieve the predictable result of caching the segments for presentation.

Regarding claim 11, the combined teachings of Arsenault and Hooper teach a method wherein the step of:

beginning the presentation of the stored first segment of said program to the user includes the steps of:

performing at least one of a descrambling operation and a decrypting operation on at least some data included in the first segment of said program; and outputting video data generated as a function of performing at least one of said descrambling operation and decrypting operation to a presentation device (**Arsenault: col. 2 line 53-**

col. 3 line 12; col. 17 line 24-col. 18 line 5).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Parra whose telephone number is 571-270-1449. The examiner can normally be reached on Under Academy Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OP


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